

REMARKS**I. Status of the Claims**

Claims 1 and 3-7 are pending in the application. Claims 5 and 6 have been amended for clarity. Claims 2 and 8-20 are canceled.

Reconsideration and allowance of all of the pending claims is respectfully requested.

New matter is not being introduced in the application by way of this amendment.

II. Issues under 35 U.S.C. § 112, first paragraph

Claim 5 is rejected under 35 U.S.C. § 112, first paragraph for failing to comply with the written description requirement. Applicants respectfully traverse the rejection.

Specifically, the Examiner objects to the fact that claim 5 requires that the final product polymer comprises 70% by weight of perfluorocyclopentene and that claim 5 also requires that the final product is made using perfluorocyclopropene.

In response, Applicants have amended claim 5 to clarify that the final product polymer comprising perfluorocyclopentene is made using perfluorocyclopentene. Accordingly, claim 5 has adequate written description in the specification to satisfy the requirements of 35 U.S.C. § 112, first paragraph, and as such, withdrawal of the rejection is respectfully requested.

III. Issues under 35 U.S.C. § 112, second paragraph

Claims 6 and 7 are rejected under 35 U.S.C. § 112, second paragraph for being indefinite. Applicants respectfully traverse the rejection.

The Examiner objects to claim 6 for depending upon cancelled claim 2. In accordance with the Examiner's suggestion, Applicants have amended claim 6 to depend from claim 1. As such, claim 6 particularly points out and distinctly claims the subject matter which Applicants regard as the invention. Withdrawal of the rejection is respectfully requested.

IV. Double Patenting

Claim 5 is provisionally rejected under the obviousness-type double patenting as being unpatentable over claim 1 of co-pending application number 11/808,394 ("the '394 application").

In response, Applicants co-file herewith a Terminal Disclaimer over the '394 application.

In legal principle, the filing of a TD simply serves the statutory function of removing the rejection of obviousness-type double patenting, and does not raise a presumption on the merits of the rejection. It is improper to view the simple expedient of "obviation" as an admission or acquiescence on the merits. *Ortho Pharmaceutical Corp. v. Smith*, 22 USPQ2d 1119, 1124 (Fed. Cir. 1992) citing *Quad Envil. Technologies Corp. v. Union Sanitary Dist.*, 946 F.2d 870, 874, 20 USPQ2d 1392, 1394-95 (Fed. Cir. 1991).

Based on the foregoing, the provisional obviousness-type double patenting rejection is rendered moot.

V. Prior art based rejections

The following prior art based Rejections (A) and (B) are pending:

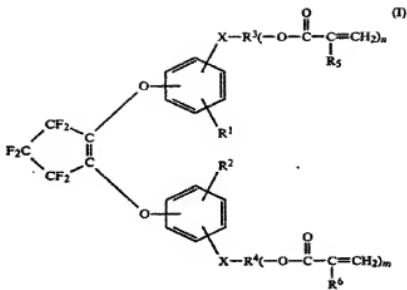
(A) Claim 1 is rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Muller et al. (U.S. Patent 5,132,335; see entire document); and

(B) Claims 3, 4, 6 and 7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Muller et al. (U.S. Patent 5,132,335) in view of Nakamura et al. (U.S. Patent 5,427,858).

Applicants respectfully traverse Rejection (A) and Rejection (B).

With respect to Muller et al., the Examiner has taken the position that Muller et al. teach polymers which are decomposition products of perfluoroolefins comprising more than 70% by weight of perfluorocyclopentene. Applicants respectfully disagree. Applicants note that the polymers of Muller et al. do include a perfluorocyclopentene ring, however, there is no possible way that these polymers would be considered decomposition products of perfluoroolefins. According to the definition of a perfluoroolefin, a perfluoroolefin: a) contains at least one carbon-carbon double bond; b) all carbon atoms are substituted with fluorine groups; and c) there are no carbon-hydrogen bonds.

The monomers of Muller et al. having the perfluorocyclopentene group which are used to make polymers have the following structure:



in which, in each case independently of one another,
 R^1 and R^2 denote C_1 -to C_4 -alkyl, C_1 - to C_4 -
 halogenoalkyl or hydrogen,
 R^3 and R^4 denote $(n+1)$ - or $(m+1)$ -valent, straight-
 chain or branched hydrocarbon radicals having 2
 to 15 carbon atoms, which may optionally contain
 1 to 3 oxygen bridges,
 R^5 and R^6 denote hydrogen or methyl,
 X represents



and
 n and m denote integers from 1 to 5

In view of the many carbon-hydrogen bonds present in the formula, one skilled in the art would reasonably conclude that the polymers of Muller et al. could not be considered by one skilled in the art as being a decomposition product of a perfluoroolefin.

In the last line on page 6 bridging to line 2 on page 7 of the present Office Action, it is stated:

The perfluorocyclopentene portions of the formed polymers are considered to read upon the "decomposition products of a perfluoroolefin" in claim 1.

However, perfluorocyclopentene is a compound having an alternate chemical name of 1,2,3,3,4,4,5,5-hexafluoro-1-cyclopentene and such a component is not included in the formula

shown in column 4 of Muller et al. Furthermore, the other portion (30% or less) of the perfluoroolefins (other than perfluorocyclopentene) are olefins having all of the hydrogen atoms substituted by fluorine (this is required by the definition of "perfluoroolefins"). Therefore, it is not possible that acrylic or methacrylic ester component of the substituted 1,2-bis(phenoxy)-portions as disclosed in formula (1) of Muller et al is included in the "polymers of decomposition products of perfluoroolefin comprising more than 70% by weight of perfluorocyclopentene" of the presently claimed invention.

Furthermore, the Examiner should understand that including acrylic or methacrylic ester component (such as acrylic or methacrylic ester component of substituted 1,2-bis(phenoxy)-portions as disclosed in formula (I) of Muller et al.) in the decomposition products of perfluoroolefins of the present invention will result in a material that cannot be used to produce the polymers for the cover film of the presently claimed invention (please see page 19 line 24 bridging to page 20, line 2 of the present specification).

Lastly, Muller et al. state:

The invention relates to new acrylic acid and methacrylic acid esters of substituted 1,2-bis(phenoxy)-3,3,4,4,5,5-hexafluoro-1-cyclopentenes, their preparation and their use as monomers for application in the dental field. (See column 1, lines 7 to 11 of Muller et al.)

It is obvious from the description that the subject matter of Muller et al. is clearly different from that of the presently claimed invention, namely, "polymers of decomposition products of perfluoroolefins comprising more than 70% by weight of perfluorocyclopentene".

As the M.P.E.P. directs, all the claim limitations must be taught or suggested by the prior art to establish a *prima facie* case of anticipation or obviousness. See M.P.E.P. §§ 2131 and

2143.03. In view of the fact that Muller et al. fail to teach or suggest polymers which are decomposition products of perfluoroolefins comprising more than 70% by weight of perfluorocyclopentene, all of the claim limitations are neither taught nor suggested by Muller et al. Accordingly, significant patentable distinctions exist between the present invention and Muller et al.

The Examiner, aware of the deficiencies of Muller et al. with respect to claims 3, 4, 6 and 7, cites Nakamura et al. to cure these deficiencies. Applicants respectfully submit that Nakamura et al. fail to cure the deficiencies of Muller et al. so as to render claim 1 unpatentable.

With respect to the teachings of Nakamura et al., Nakamura et al. only specifically mention PTFE, see column 4, line and do not suggest decomposition products of perfluoroolefins comprising more the 70% by weight of perfluorocyclopentene, as presently claimed. The artisan would have no reason to pick the perfluorocyclopentene ring from the compound of formula (1) of Muller et al and come to the present invention.

In view of the fact that Muller et al. and Nakamura et al. fail to teach or suggest polymers which are decomposition products of perfluoroolefins comprising more than 70% by weight of perfluorocyclopentene, all of the claim limitations are neither taught nor suggested by the cited references. Accordingly, withdrawal of Rejection (A) and Rejection (B) is respectfully requested.

Conclusion

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Garth M. Dahlen, Ph.D., Esq. (Reg. No. 43,575) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

By 
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Attached: 1) Terminal Disclaimer over the '394 application